

AMERIFLUX  
MANAGEMENT PROJECT

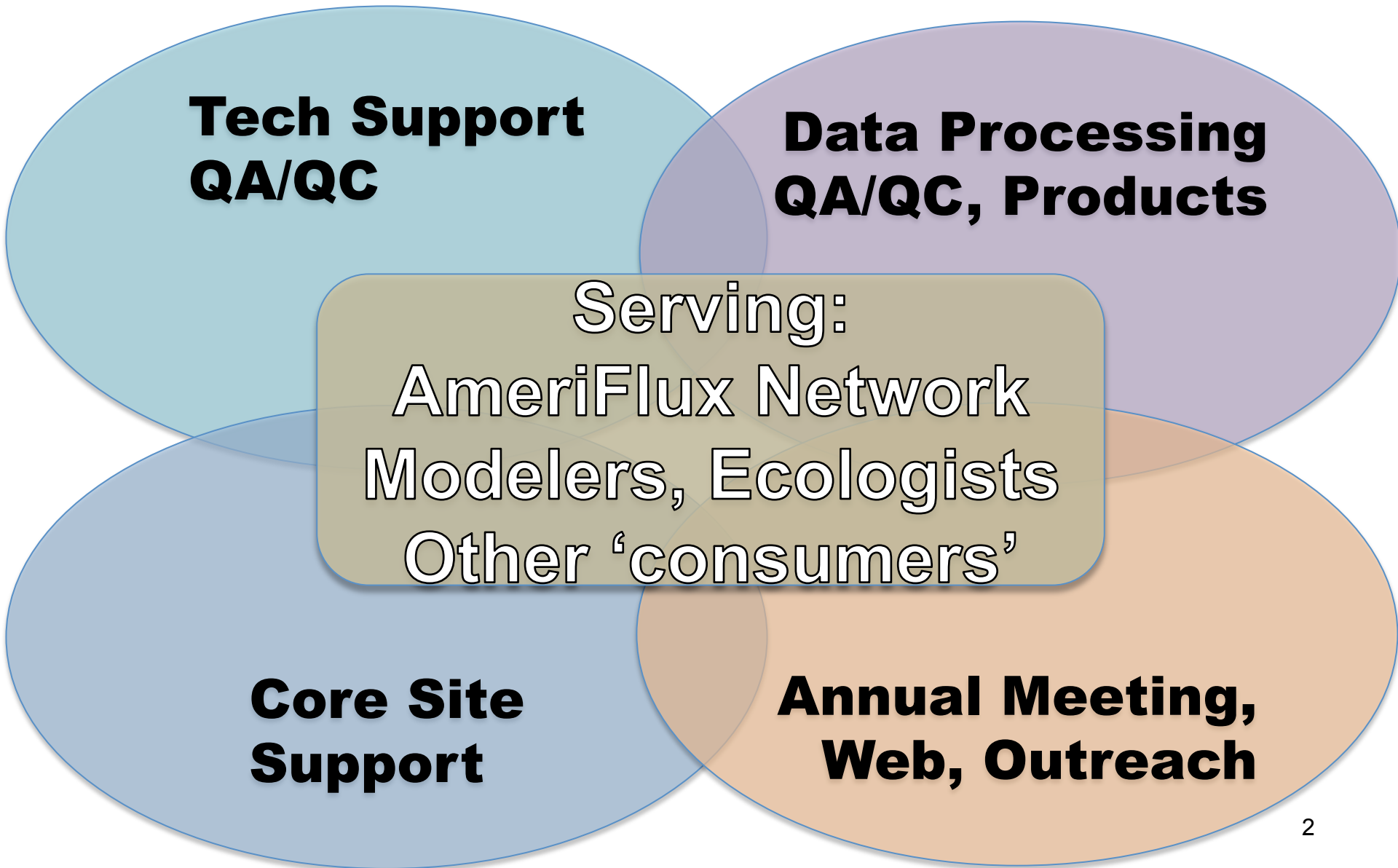
# Welcome to The AmeriFlux PI Annual Meeting

May 4-5, 2014

Bolger Center, Potomac, MD



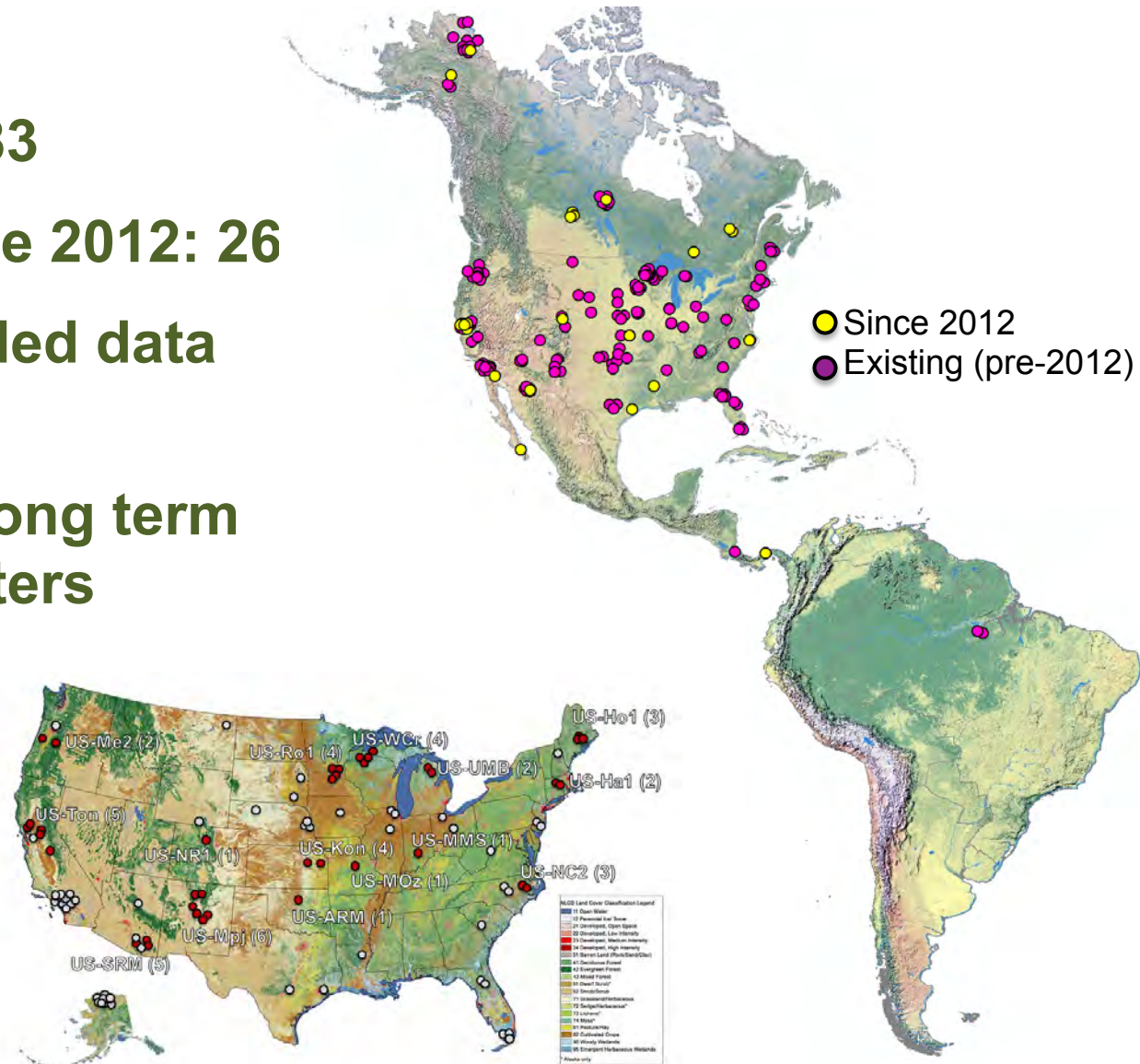
# AmeriFlux Management Project



# AmeriFlux Network is growing

## AmeriFlux Sites

- Total number: 183
- Sites joined since 2012: 26
- Sites that uploaded data 2010–2014: 62
- Core sites with long term funding: 15 clusters  
> 41 sites

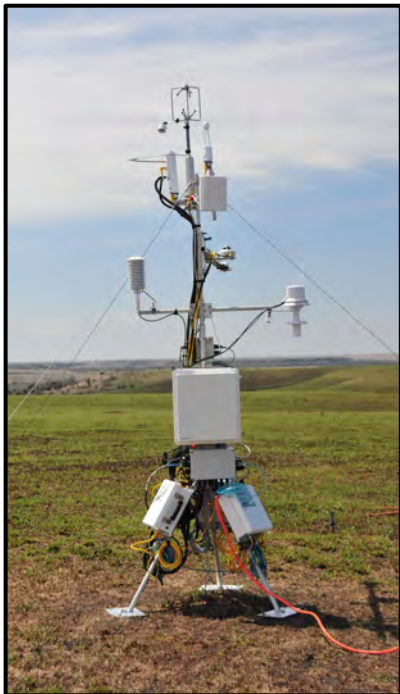


# Tech QA/QC

**GOAL:** maintain high-quality, comparability, and continuity of observations, and support innovation.



Stephen, Chad, Dave, Sébastien



Inter-comparisons with a portable eddy covariance system



## ○ Sites planned for 2014

Diablo, CA  
ARM-SGP, OK  
Harvard Main, MA  
Harvard Hemlock, MA  
Bartlett, NH  
Mead, NE  
Mayberry, CA (CH<sub>4</sub>)  
Wind River, WA  
Austin Cary, FL

## ● Sites visited in 2013

Sherman Island, CA  
Kansas Field Station, KS  
Konza Prairie, KS  
Willow Creek, WI  
Rosemount, MN  
Niwot Ridge, CO  
Ozarks, MO  
Sillas Little, NJ



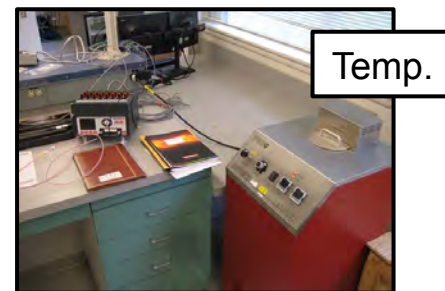
# Tech QA/QC

## A resource for the whole AmeriFlux community

- Intercomparisons at eight sites/year
- Provide calibrated PAR sensors
- Provide CO<sub>2</sub> standards. CH<sub>4</sub> soon!
- Equipment loans to avoid data gaps
- Technical support
- Developing calibration protocols for temperature and relative humidity sensors

### Upcoming QA/QC Tech activities:

- 2014-2015: Multi-vendor gas analyzer comparison in Davis, CA
- 2014: CH<sub>4</sub> intercomparison and calibration standards
- 2015: Sub-canopy storage



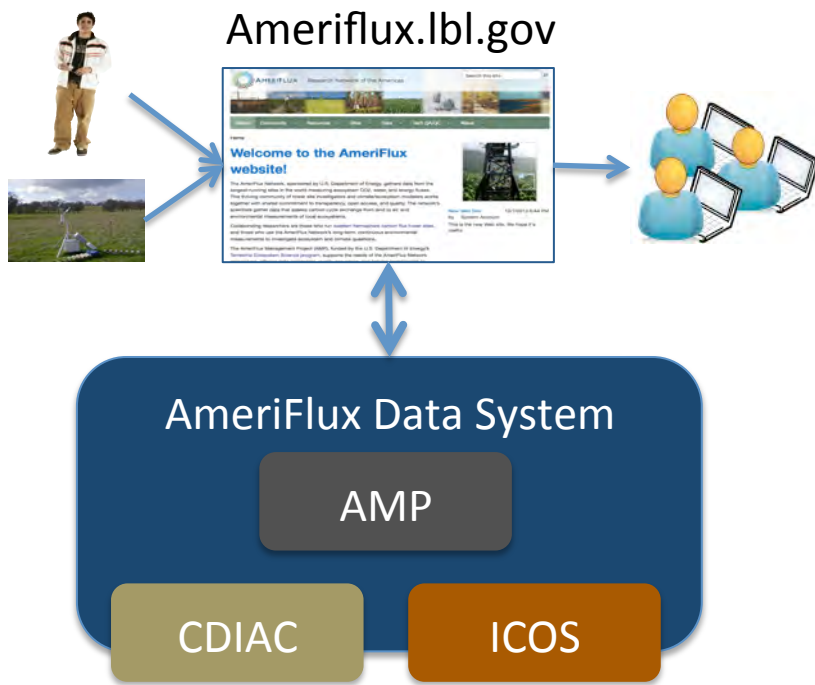
# AmeriFlux Data System

**GOAL:** provide high-quality data products and services to users of AmeriFlux data in collaboration with AmeriFlux site teams.



## The data team serves five primary roles:

- Support data submission
- Provide data archiving
- Perform data QA/QC
- Curate BADM
- Enable use of data



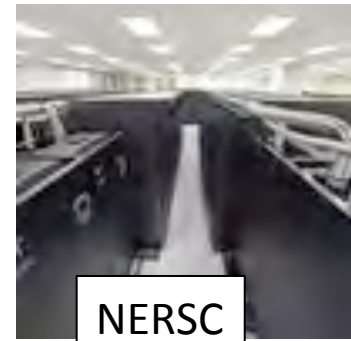
# AmeriFlux Data System

## Current Data Activities:

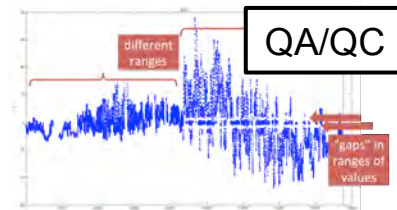
- High-frequency data upload and archiving
- Half-hour data upload and archiving
- Three levels of data QA/QC
- Revised BADM protocols (w/ICOS)
- Working with sites to update BADM data
- **Running new “level 4” pipeline (w/ICOS)**
- Annual data managers’ workshop
- Technical support as requested

## Upcoming Data activities:

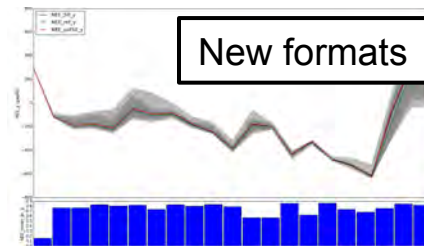
- Summer 2014: Gap-filled data product, new data download functionality, and “e-mail site-PI’s function
- 2014: Night-time partitioning (Reichstein)
- 2015: Day-time partitioning (Lasslop)



NERSC



QA/QC



New formats



Data Managers Workshop '14

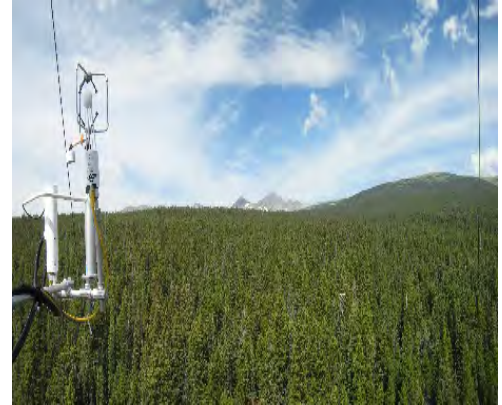
# AmeriFlux Data QA/QC and Processing Status

- Total number of sites: 183
- Sites completed final QA/QC: 46 (463 site years)
- Sites ready for processing: 25
  - ready (9): BR-Sa3, US-AR1, US-Bo1, US-Ha1, US-Lin, US-NC1, US-NC2, US-Ne3, US-Sdh
  - pending final checks (16): US-Ha2, US-Fmf, US-Fuf, US-Fwf, US-GLE, US-Kon, US-Me2, US-MMS, US-Mpj, US-NR1, US-SRM, US-Ton, US-UMB, US-UMd, US-Var, US-Whs
- Sites with issues waiting for tower team feedback: 17



# AmeriFlux Rapid Response Flux System

- Full eddy covariance ( $\text{CO}_2$ ) and micromet system
- Take advantage of special opportunities
- Loan up to three years.
- First deployment: burned-unburned site pair in Valles Caldera



## Other News in AMP

- Updated web site. More features this summer!
- Safety training videos and tower safety seminars.

## Upcoming Events

7th Annual Summer Course in Flux Modeling and Advanced Measurements. July 2014. Niwot Ridge, CO  
**AMP will provide support for two students**

Annual AmeriFlux Data Workshop  
– Spring 2015 in Berkeley, CA

# Opportunities around the Network

- **Inform the USGCRP and CCIWG: research priorities, coordinated funding actions**
- **Small Business Innovation Research (SBIR) : what instrumentation, for what platforms?**
- **Synthesis activities: Take advantage of new AmeriFlux / FLUXNET data products; New obs**
- **New FLUXNET grant (Baldocchi, PI)**
- **NEON coming on line**
- **NASA ABOVE**
- **DOE NGEE Arctic, NGEE Tropics**
- **The Next Big Thing? Breakout Session**

# AmeriFlux Science Steering Committee



Dennis Baldocchi  
UC Berkeley



David Bowling  
U Utah



Jing M. Chen  
U Toronto



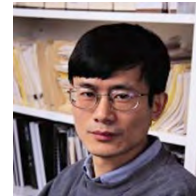
Kenneth Davis  
Penn State



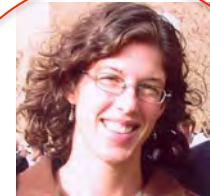
David Hollinger  
Forest Service (UNH)



Bev Law  
Oregon State U



Xuhui Lee  
Yale U



Marcy Litvak  
U New Mexico



Dario Papale  
U Tuscia



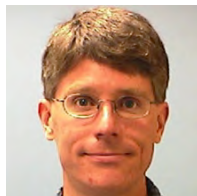
Dan Ricciuto  
ORNL



Steve Running  
U Montana



HaPe Schmid  
Forschungszentrum  
Karlsruhe



Peter Thornton  
ORNL



Steve Wofsy  
Harvard U



# AmeriFlux Management Project Team



## **Project Leads, Core Sites, Outreach**

Margaret Torn, LBNL



Dennis Baldocchi, UCB



**Project Coordinator**  
Marilyn Saarni, LBNL



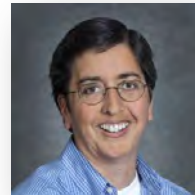
## **Technical QA/QC**

Sébastien Biraud, LBNL

**Stephen Chan, LBNL**

Dave Billesbach, UNL

Chad Hanson, Oregon State



## **Data Systems, QA/QC**

Deb Agarwal, LBNL

Dario Papale, ICOS Italy

Tom Boden, ORNL, CDIAC

Marty Humphrey, U Virginia

**Gilberto Pastorello, LBNL**

**Cristina Poindexter, LBNL**

**Rachel Hollowgrass, LBNL**

Catharine van Ingen, LBNL

Boris Faybishenko, LBNL

Norm Beekwilder, U Virginia

## **Co-Investigators**

Bev Law, Oregon State

Steve Wofsy, Harvard



# AMP Resources at Meeting

## “The Dr. is In”

– Consult, tutorials, and requests for data, BADM, tech, and user-interface tools

– Room 300 during breaks, lunch, posters, and by appointment

**Posters:** (1) Data, (2) Tech, and (3) Core, Rapid Response, & Outreach



**Project Coordinator**  
**Marilyn Saarni**

**AmeriFlux Management Project QAGC Technical Team**  
Introduction  
Meet the Tech Team  
Outgoing and Future Activities

**Meet the Tech Team**  
From left to right:  
David Blumhagen (University of Nebraska-Lincoln)  
Seth Hines (Oregon State University)  
Seth Hines (Oregon State University)  
Seth Hines (Oregon State University)

**Outgoing and Future Activities**  
QAGC has been successful in its mission to provide a network of high-quality, open-access, and user-friendly data for the research community. The network is currently composed of 10 sites, each with its own unique data set. The network is currently composed of 10 sites, each with its own unique data set. The network is currently composed of 10 sites, each with its own unique data set.

**AmeriFlux Data Collection, Processing, and Data User Support**  
Introduction  
Data Collection  
Data Processing  
Data User Support

**Data Collection**  
The AmeriFlux Data Management System is providing real-time, high-frequency data processing capabilities, improved biological, analytical, and data quality assurance. The system is currently processing data from 10 sites, each with its own unique data set. The system is currently processing data from 10 sites, each with its own unique data set.

**Data Processing**  
The AmeriFlux Data Management System is providing real-time, high-frequency data processing capabilities, improved biological, analytical, and data quality assurance. The system is currently processing data from 10 sites, each with its own unique data set. The system is currently processing data from 10 sites, each with its own unique data set.

**Data User Support**  
The AmeriFlux Data Management System is providing real-time, high-frequency data processing capabilities, improved biological, analytical, and data quality assurance. The system is currently processing data from 10 sites, each with its own unique data set. The system is currently processing data from 10 sites, each with its own unique data set.

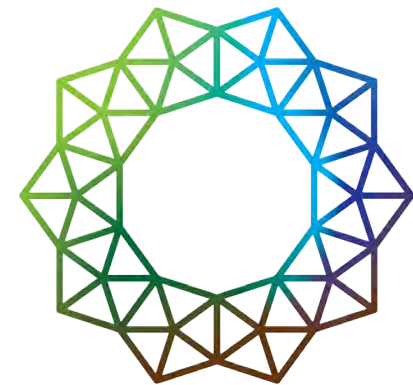
**The AmeriFlux Management Project: Overview**  
Introduction  
AmeriFlux Core Sites  
New Website Look and Functionality!

**Introduction**  
The AmeriFlux Management Project is a network of 10 sites, each with its own unique data set. The network is currently composed of 10 sites, each with its own unique data set. The network is currently composed of 10 sites, each with its own unique data set.

**AmeriFlux Core Sites**  
The AmeriFlux Management Project is a network of 10 sites, each with its own unique data set. The network is currently composed of 10 sites, each with its own unique data set. The network is currently composed of 10 sites, each with its own unique data set.

**New Website Look and Functionality!**  
The AmeriFlux Management Project is a network of 10 sites, each with its own unique data set. The network is currently composed of 10 sites, each with its own unique data set. The network is currently composed of 10 sites, each with its own unique data set.

# Thank you



AMERIFLUX

[ameriflux@lbl.gov](mailto:ameriflux@lbl.gov)

